

**REMARKS**

Claims 1-35 are pending in this application. By this Amendment, claims 1, 2, 5, 12, 13, 30 and 33 are amended to replace "electro-optic" with "liquid crystal" to clarify the language of the claims. No new matter is added. Claims 3, 4, 6-11, 14-29, 31, 32, 34 and 35 are withdrawn from consideration. Reconsideration of the application is respectfully requested.

**I. Rejection Under 35 U.S.C. §102(b)**

The Office Action rejects claims 1, 2, 5, 12, 13, 30 and 33 under 35 U.S.C. §102(b) over U.S. Patent No. 6,097,358 to Hirakawa et al. (Hirakawa). Applicants respectfully traverse the rejection.

Hirakawa does not disclose, teach or suggest a driving method or a device sequentially selecting "in a direction from a first sub-field period and a second sub-field period positioned on a boundary of said plurality of first sub-field periods and said plurality of second sub-field periods toward a first sub-field period and second sub-field period at a position most remote from said boundary," as recited in independent claims 1 and 30. Additionally, Hirakawa does not teach or suggest "each of said plurality of second sub-field periods substantially corresponding to a length of a sum of said plurality of first sub-field periods and any one of the first sub-field periods," as recited in independent claims 1 and 30.

The Office Action generally alleges that Hirakawa teaches sequentially selecting in a direction from a first sub-field period SF5 and a second sub-field period SF6 positioned on a boundary TR of the plurality of first sub-field periods SF1-SF5 and the plurality second sub-field periods SF6-SF10 toward a first sub-field period SF1 and a second sub-field period SF10 at a position most remote from the boundary TR., citing Fig. 3, and col. 7, line 55 - col. 8, line 22. Notwithstanding these assertions, Hirakawa does not disclose, teach or suggest, in either the specification or Fig. 3, sequentially selecting in the specified direction and a

relationship between each of the plurality of second sub-field periods and a length of the plurality of first sub-field periods.

Hirakawa teaches, in Fig. 3, a field F including a first sub-field group SFG1 having sub-fields SF1-SF5, and a second sub-field group SFG2 having sub-fields SF6-SF10. See col. 7, line 55 - col. 8, line 6. Each sub-field SF1-SF10 includes an address period TA and a sustain period (display period) TS. See col. 7, lines 63-65. In the address period TA, a wall charge necessary to sustain light-emission by a drive sequence may be formed and erased to control the emission of light from the sub-pixels. See col. 8, lines 44-57. In the sustain period TS, a sustain voltage  $V_s$  is applied to maintain a light-emitting state in sub-pixels that retain a wall charge. See col. 8, lines 57-60. Therefore, light emission for each individual sub-pixel depends on whether the sub-pixel includes a wall charge.

Hirakawa also teaches that it is desirable that a specified sub-field group SFG1-SFG3 be selected in descending order of luminance weight or the sum of luminance weights in the sub-field groups SFG1-SFG3. See col. 11, lines 21-29. Although the sub-pixels may arguably be selected in sequential order, e.g., from SF1 to SF10, Hirakawa does not teach or suggest that the sub-pixels are sequentially selected in directions from a first sub-field period SF5 and a second sub-field period SF6 positioned on a boundary TR of the plurality of first sub-field periods SF1-SF5 and the plurality second sub-field periods SF6-SF10 toward a first sub-field period SF1 and a second sub-field period SF10 at a position most remote from the boundary TR, as alleged by the Office Action. Therefore, Hirakawa does not teach or suggest sequentially selecting in the specified direction and a relationship between each of the plurality of second sub-field periods and a length of the plurality of first sub-field periods, as set forth in claims 1 and 30.

The driving method and device of claims 1 and 30 sequentially selects sub-fields in the specified direction, and includes a relationship between each of the plurality of second

sub-field periods and a length of the plurality of first sub-field periods. As a result, an occurrence of a defect in a level of grayscale resulting from the discontinuity of the sub-field may be avoided. Because Hirakawa does not teach or suggest that sub-pixels are sequentially selected in the direction from SF5 to SF1 and from SF6 to SF10, an occurrence of a defect in a level of grayscale resulting from the discontinuity of the sub-field is unavoided.

In the Response to Arguments section, the Office Action alleges that Hirakawa teaches that a "weighted luminance" represents a number of discharges. See col. 1, lines 59-65. However, the Office Action then asserts that each discharge must inherently constitute a "length of a period." Applicants respectfully disagree that a number of electric discharges, e.g., weighted luminance, constitutes a length of period.

As previously discussed, each sub-field SF1-SF10 includes a sustain period TS in which a sustain voltage Vs is applied to maintain a light-emitting state in sub-pixels that retain a wall charge. See col. 7, lines 63-65, and col. 8, lines 57-60. Luminance of a display depends on the number the number of discharges, e.g., weighted luminance, per unit time. See col. 1, lines 50-52. Therefore, Hirakawa teaches that the term "weighted luminance" corresponds to a luminance weight of the sub-field, e.g., number of discharges in a sub-field, not "lengths" of a period for discharge. See col. 8, lines 22-26.

For at least the reasons discussed above, claims 1 and 30 are patentable over Hirakawa. Claims 2, 5, 12, 13 and 33 variously depend from claims 1 and 30, and thus also are patentable over Hirakawa for at least the reasons set forth above, as well as for the additional features they recite. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

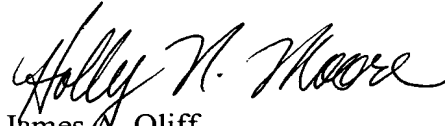
## **II. Conclusion**

Claims 3-11 depend from independent claim 1. thus, it is respectfully requested that claims 3-11 be rejoined upon allowance of independent claim 1.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-35 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:  
Request for Continued Examination

Date: December 20, 2005

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